



Oil and gas

A profile in
partnership

CGI

Over 30 years of partnership

Delivering value in oil and gas

The oil and gas industry is going through a significant transformation, which will have a fundamental impact on the key industry players, the underlying business models, and on the entire supply chain ranging from energy generation and production, all the way through to distribution and customer interaction.



First, while the industry had recovered from a period of low oil prices in recent years, renewed pressure on oil and gas prices emerged due to a drastic fall in oil demand and large production cuts to stabilize the market amid the pandemic crisis. In addition, geopolitical and societal developments, as well as technological advancements are adding to the pressure. The 2021 Voice of Our Clients reveals that responding to revenue pressures resulting from low oil prices remains the most impactful industry trend, ahead of becoming a digital organization to meet customer expectations.

Although oil and gas companies have already adopted a strong focus on cost reduction, cash flow optimization and more selective capital investments, the pressure will mount to continue increasing operational efficiencies, while at the same time applying significant scrutiny on capital investments, both related to investment size (\$ value) and investment type (fossil versus non-fossil).

Second, the energy transition is having a profound effect on the industry, accelerated by forces such as climate change, the plunging cost of renewable energies like wind and solar, and technology developments in areas such as

batteries, storage and electric and autonomous vehicles. Even though it may be too early to tell, the COVID-19 pandemic is likely to further accelerate the energy transition, for example due to the rising popularity of renewable energies among capital investors and governments. Non-oil and gas energy investments are expected to be more than 50% of all energy investments in the coming decade, and oil and gas companies are progressively allocating more investments to renewable energies through acquisitions, new venture participations, and new business models and opportunities.



Third, substantial investments in digital transformation are facilitating the energy transition while optimizing the efficiency of the traditional business. As companies upgrade their digital capabilities and improve the way they embed data insights into their operating models, the potential to drive significant cost savings and productivity improvements will be realized. Oil and gas companies are aiming to become more customer centric and are focused on transforming into digital organizations and leveraging digital technologies to be able to meet rapidly evolving customer expectations at scale.

At CGI, we bring unique capabilities and experience in upstream, midstream, downstream and renewables operations. In this brochure, we share a few real-world examples of our work with a major oil and gas client across these domains. It demonstrates a subset of our capabilities and track record of delivering value to

the industry for more than 30 years with an end-to-end portfolio of IT and business consulting, systems integration and managed IT and business process services.

As many oil and gas companies look to rebound and eventually reinvent their operations to adapt to a new reality, we leverage our unique local proximity model to gain a deeper understanding of their business needs, build strong relationships, and deliver our innovative business and IT services across the value chain. On behalf of our nearly 80,000 employees worldwide, including our global network of delivery centers, we are pleased to share this client story with you, and invite you to meet with us in person to continue the dialogue.

Our end-to-end services

CGI has partnered with oil and gas companies for over 30 years and we understand what it takes to stay ahead of industry trends and thrive in the continually evolving industry landscape. Leveraging our deep oil and gas domain expertise and technology solutions, we help our clients take the next step in their digital transformation journeys to drive optimized business outcomes. Our end-to-end services portfolio includes strategic IT and business consulting, systems integration and managed IT and business process services accelerated by our IP-based solutions.



Insights from CGI Voice of Our Clients

The move toward net-zero is accelerating across the world. This includes the shift to decentralized power generation and the adoption of renewable energy sources. For the oil and gas industry, change remains a constant. Oil and gas companies face increasing volatility from external forces such as price fluctuations, geopolitics and trade dynamics. They also are under pressure to address future sustainability due to growing energy demand and the energy transition.

Now more than ever, oil and gas companies must make strategic decisions about their business and IT landscape.

The 2021 CGI Voice of Our Clients presents the findings from our one-on-one interviews with 1,700 executives across the industries and geographies we serve. These strategic discussions provide a unique view into how business and IT priorities evolved rapidly due to the pandemic.



Top trends ranked by impact

2019

1 Becoming digital organizations to meet customer expectations

2 Growing importance of customer loyalty and differentiation in retail

3 Increasing amounts of data insight and analytics to harness business value

4 Responding to revenue pressures resulting from low oil prices

5 Protecting through cybersecurity

2020

1 Responding to revenue pressures resulting from low oil prices

2 Becoming digital organizations to meet customer expectations

3 Growing importance of customer loyalty and differentiation in retail

4 Protecting through cybersecurity

5 Increasing amounts of data insight and analytics to harness business value

2021

1 Responding to revenue pressures resulting from low oil prices

2 Becoming digital organizations to meet customer expectations

3 Protecting through cybersecurity

4 Growing importance of customer loyalty and differentiation in retail

5 Changing operational & business models to drive operational excellence

In examining the insights from our oil and gas clients, responding to revenue pressures resulting from low oil prices remains the most impactful trend year-over-year, ahead of becoming digital organizations, which continues to be a top priority. Protecting through cybersecurity rises to be the third most impactful trend for oil and gas companies followed by growing

importance of customer loyalty and differentiation in retail., This year, changing operational and business models to drive operational excellence enters the top five trends in fifth place.

Upstream Oil & Gas



Operating assets more reliably and safely, while achieving higher asset availability

The ability to collect, integrate and analyze rich data and present it to end users in a clear, structured way is vital to our client's planning, design and engineering organization.

Our client sought CGI's assistance to achieve several business objectives including: optimizing life cycle performance, improving process safety and technical assurance, reducing capital and operating expenses of facilities, and increasing engineering staff productivity by automating routine analysis.

Based on our deep industry knowledge, we developed and implemented an integrated, enterprise-wide surveillance and remote online condition-monitoring platform that improves asset reliability, safety and availability. Called SmartConnect, the platform enables the early detection of production equipment problems and identifies appropriate actions before downtime occurs—avoiding failures through real-time decision support. It reduces deferment and supports better resource planning and development of recruitment competence. The solution can be executed as a joint onsite-offshore model and integrates with other systems to deliver a single analysis source through a web portal.



Our upstream expertise includes capital projects and field development, drilling and well management, operations management, reservoir and production management, joint-venture management, IT security, chemical regulatory management, enterprise-wide surveillance and remote monitoring.

Midstream Oil & Gas



Equipping refineries with the most up-to-date cybersecurity defenses

Modernizing security and cyber defense is high on our clients' agendas. We provided this gas client with network security, endpoint remediation and system hardening for its IT security deployment program.

Through a global program that spans geographies and lines of business, we helped the client implement a consistent security standard. The program controls the security maturity and compliance measurement process throughout the enterprise, enabling informed decision-making and future planning. The program has helped significantly reduce security risk, improve uptime and supportability, and lower costs for infrastructure and support. The client's midstream refineries and upstream sites have been equipped with the most up-to-date cybersecurity defenses available.

Automated transaction screening mitigates risk

We also helped the client meet increasing obligations to comply with new laws, regulations and sanctions using our automated transaction scanning software, CGI HotScan360. This software-as-a-service platform is integrated with case management to provide an investigator workbench for pre-contract screening. It scrutinizes payment transactions in real time and alerts the client to matches against watch lists. We continue to partner with the client to enhance this leading best practice solution.



Our midstream expertise includes refining, supply and distribution, pipeline and transportation assets, retail (including card payments and loyalty programs), and supply chain optimization.

Downstream Oil & Gas

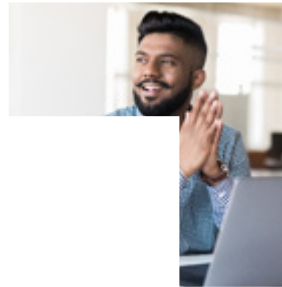


Driving digital transformation with a self-service fleet hub

Managing a fleet of vehicles has many inherent challenges and expenses. Vehicle drivers frequently need to buy petrol, pay tolls, receive service, and even cross borders to travel internationally. Our client's goal is to ensure that keeping their fleet on the road is a simple, seamless, and secure process using CGI's fleet solutions. We designed Fleet Hub, an innovative, integrated customer portal, which is now used by customers of all sizes in 30 countries across the globe.

Fleet Hub is a self-service portal that allows both employees and customers to easily view up-to-date details of a fleet, track a driver's recent purchase activity, manage purchasing allowances, and order new fuel cards—all within one system. The personalized dashboard displays information relevant to the user's role, whether they are a driver, vehicle manager, or finance director. Fleet Hub users can access the portal from a phone, tablet, or desktop for a seamless user experience every time.

Our team designed Fleet Hub to sit on top of the client's existing systems, allowing them to take advantage of modern benefits without having to completely replace legacy systems. Because of this design, the client can add the latest functionality, while avoiding any disruptions to day-to-day business. Fleet Hub is just another example of our growing partnership with the global leader in oil and gas.



Our downstream expertise includes processing, supply and distribution, pipeline and transportation assets, operational safety and cybersecurity, workforce productivity, secure tracking and IT/OT integration.

Downstream Retail Oil & Gas

Migrating to a modern fuel card platform

We manage the end-to-end IT and business processes to support a commercial fleet fuel card business targeted at the international customers of one of the world's largest retail networks, with millions of cards in use across fuel retail sites worldwide.



Moving from an in-house developed mainframe system to a product-based, industry standard fuel card solution has delivered a wide range of benefits for the client including performance improvements, cost reductions and future readiness. For example, the new solution enables fleet drivers to travel without delays and re-fuel wherever and whenever necessary while providing fleet managers with improved visibility, flexibility and control. With the successful migration to the new solution, more than half of the client's commercial fleet business is conducted through our modern fuel card platform, covering numerous Asian and European operations. We have completed multiple country rollouts with the potential to leverage the solution in new markets.



Our downstream retail expertise includes supply and distribution, pipeline and transportation assets, retail (including card payments and loyalty programs) and supply chain optimization.

Renewables

Supporting the energy transition

Oil and gas majors are targeting renewable and low-carbon development. We support the energy transition with decades of experience and a proven approach to innovation.



Many global oil and gas companies are branching out into new energy sources such as biofuels and hydrogen, integrated energy solutions that combine renewables such as wind and solar with gas, and connecting customers with new energy business models. We leverage our cross-industry and government capabilities to advance the industry's renewables objectives.

For example, IT services are needed to support the anticipated growth of the wind business operations. Our Renewables Management System (RMS) platform—used by nearly 300 wind farms across the globe—can be leveraged to monitor and remotely control assets. RMS enables the proactive and efficient management of renewable assets by providing greater insight into operations and analyzing key performance indicators and their evolution. It facilitates timely, strategic decision making, leading to greater efficiency, reduced downtime and optimized performance.

There is a major transition to future architectures such as cloud, software as a service (SaaS) and platform as a service (PaaS). We help clients assess existing applications and systems to assess their cloud-readiness. We offer CGI Unify360 Code Scanning, one of many building blocks in our unified hybrid IT managed services suite, that reduces the time required for application assessment and transition risk by uncovering any application dependency and non-compliant cloud coding lines. We also offer cloud assessments and transitions as a factory-based service.



Our renewables expertise includes asset optimization, renewables management, digital energy, asset and resource management and secure tracking.

Enterprise Services



Improving enterprise information management

Microsoft SharePoint® is the central tooling for our client's enterprise information management services that is used to store information regarding upstream, engineering, facilities and downstream operations. Our enterprise information management services are integral to this crucial part of the business.

We support our client's employees with their SharePoint site and permission management activities. Questions and requests vary from permissions and authorizations to migrations and customizations. By using Microsoft's standard as well as reusable components, built and supported by CGI, these customization requests can be realized in a short timeframe and in a stable manner, supporting specific business requirements.

Our experts manage a high volumes of service requests each month and provide a seamless service for the client's employees in line with strict service level agreements that govern, for example, turnaround time. As part of our continuing journey, we are working closely with the client to shape Office 365® services—bringing the most up-to-date technology and service models to bear. Our wider experience with other clients combined with years of service delivery excellence enables us to build a future-proof service.

Support models include state-of-the-art user technologies, such as an automated chatbot function with a humanoid interaction experience that provides intelligent understanding and emergency request handling.



Our Information Management Services for the client include an automated self-serve platform delivering ready-to-deploy compliant services, standard 24x5 service window, with 24x7 for some services, shorter SLAs and the flexibility to support request-based or on-demand fixed price services.

Digital Transformation



Modernizing businesses through agile digital transformation

Today, organizations are focused on the incubation and development of global capabilities, thought leadership and strategic partnerships in key technology areas, and building the technologies and capabilities required to realize these goals.

Clients are realizing that digital transformation requires a strong end-to-end focus—one that goes beyond digital touchpoints to encompass application portfolios end-to-end. A well-planned journey can help oil and gas companies become customer-centric enterprises in which digital information is the lifeblood of operations. Success depends on adopting a holistic integrated, enterprise-wide digital strategy, ensuring there is an aligned approach to creating a “single source of truth” and providing consistent ways to enable cross-selling opportunities for clients.



Our business consulting services help oil and gas companies assess where they currently are in their transformation journeys, where they want to be in the future, and how to get to their desired state while staying aligned to their overall business goals.

Systems Integration

Delivering seamless and secure connections

The need for expert integration services in today's digital world is more urgent than ever. Our systems integration services support the end-to-end digital enterprise, connecting the back-office through to the front-office.



As oil and gas companies continue to digitize operations, they seek to deliver seamless services that extend from their core systems to other systems, devices and platforms. Thus, they increasingly need to integrate data and functionality from more and more sources, both internal and external.

We have decades of experience in bringing together systems and technologies for clients. Our enterprise systems integration capabilities support IT modernization efforts to optimize existing and new technologies. This includes integrating critical data from traditional sources as well as emerging ones, such as the Internet of Things (IoT).



We enable oil and gas majors modernize systems to enhance IT and work processes, reduce costs and improve business outcomes. We help clients achieve quality integration of their mission-critical systems—ensuring accuracy and integrity as well as robust security and data privacy.

Managed IT and Business Process Services



Embracing new IT delivery models

In the rapidly evolving oil and gas industry, leading players are looking to embrace new IT delivery models with the appropriate agility and predictability to maximize business outcomes.

Our global delivery network is designed to deliver the appropriate models and transformation approaches, including adopting agile and DevOps ways of working. These transformation approaches address the organizational aspects as well as required modernization of the IT landscape, providing the benefits of cloud and our IaaS/SaaS offerings to the business.

At the heart of our Global Solution Center is our India-based delivery hub, an IT and high business domain skilled hub. It includes petroleum and chemical engineers, geophysicists and retail payment experts.

This hub is the base for more than 1,000 experts dedicated to oil and gas clients. The mixture of IT and business domain skills and strong commitment to client success form the cornerstone of our successful deliveries as recognized through our high client satisfaction scores.

As part of our global delivery model, we have created a robust subsurface and wells software development capability in India with several hundred full-time professionals including a large number of business and technical domain experts who are using distributed agile and DevOps approaches to drive agility and innovation.



Our global delivery model includes onshore, nearshore and offshore delivery capabilities that support client-proximity teams in accelerating clients' digital evolution. We have teams located close to our clients in cities such as Beijing, Bangalore, Cairo, The Hague, Kuala Lumpur, Calgary and Aberdeen.

Digital Accelerators

Boosting innovation

In the oil and gas industry, success is determined largely by output, control of costs and projects, creativity and innovation. However, not all breakthroughs need to be disruptive.



Innovation is not always about inventing something completely new. Many successful and short-term-to-market innovations re-use and combine existing building blocks, shaping new solutions or services. We have taken this approach with technologies and techniques such as Smart Glass, Microsoft HoloLens, Advanced Threat Intelligence, our Data2Diamonds methodology and more.

Business value does not lie in individual products, but in smart combinations and strategies. Often, evolutionary approaches based on continuous improvements or incremental steps are more effective than revolutionary approaches built on radical innovation.



Built in collaboration with clients, CGI's suite of over 170+ intellectual property-based solutions—including solutions specifically developed for the energy industry—capture industry best practices, building innovation into clients' businesses from end to end.

An Eye in the Sky



Protecting energy highways through earth observation

Energy companies invest billions of dollars in constructing the grids and pipelines that deliver the resources to power our world. Protecting these “energy highways” is of critical importance.

Companies traditionally rely on helicopters, vehicles, or workers on foot to monitor their infrastructure. This process is slow, costly and prone to human error. The growing availability of Earth Observation (EO) satellite imagery offers a birds-eye view of these networks. CGI SatSight uses advanced analytics to examine satellite images, detect new hazards, and automatically notify clients in near real time.

CGI SatSight combines openly available data from the European Space Agency's Sentinel satellite, with our proprietary algorithms to examine the satellite's images. The solution uses advanced analytics to automatically search for natural and manufactured changes like floods and vegetation growth, or building and excavating activities that can interfere with underground pipes and lines. While traditional monitoring tactics generally take place once a month, CGI SatSight analyzes images as soon as they are available, which usually is every 3-5 days.



Our internal ICE (Innovate, Collaborate, Evolve) program facilitated the development of additional algorithms and the use of commercial satellites for higher-resolution images. The ICE program incubates proximity teams' innovations into scalable, replicable solutions for global application. These programs, including a unique partnership with earth observation experts at the Technical University of Ostrava plays a key role in the development of additional use cases.

Automation to Drive Value

Leveraging intelligent automation for a competitive edge

Every business needs smart solutions to become sustainable. We work with clients to maximize the advantages of emerging technologies such as artificial intelligence, robotics and advanced analytics to enable continuous innovation, address new business opportunities and realize business value.



Leading organizations view intelligent automation as a key enabler of digital transformation, helping them to transform the way they do business, create and deliver services, interact with customers and citizens, and enable employees to focus on higher-value activities.

For many oil and gas companies, automation serves as an opportunity to improve efficiencies and safety measures, reduce costs and address skilled labor shortages.

Through the smart deployment of intelligent automation services including artificial intelligence, robotics and advanced analytics, we help our oil and gas clients improve efficiencies and accelerate digitization.



We help clients use the full spectrum of automation wherever they are in their automation journey—from robotic process automation (RPA) to artificial intelligence (AI) that ultimately will emulate full human cognition and empathy.



About CGI

Insights you can act on

Founded in 1976, CGI is among the largest IT and business consulting services firms in the world.

We are insights-driven and outcomes-based to help accelerate returns on your investments. Across hundreds of locations worldwide, we provide comprehensive, scalable and sustainable IT and business consulting services that are informed globally and delivered locally.

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